

CLAIMS

1. (Previously presented) An isolated polypeptide, comprising the amino acid sequence of SEQ ID NO:24.
2. (Canceled).
3. (Previously presented) An isolated polypeptide, comprising the amino acid sequence of SEQ ID NO:8.
4. - 10. (Canceled).
11. (Previously presented) A method for identifying a compound that modulates a FP receptor variant, comprising: a) contacting said FP receptor variant with a compound, wherein said FP receptor variant is an isolated FP receptor variant or a FP receptor variant over-expressed in a genetically engineered cell, and b) determining the level of an indicator, which correlates with modulation of a FP receptor variant, wherein an alteration in the level of said indicator as compared to a control level indicates that said compound is a compound that modulates a FP receptor variant, wherein said FP receptor variant in step (a) is a polypeptide comprising the amino acid sequence of SEQ ID NO:24.
12. (Previously presented) A method for identifying a compound that modulates a FP receptor variant, comprising: a) contacting said FP receptor variant with a compound, wherein said FP receptor variant is an isolated FP receptor variant or a FP receptor variant over-expressed in a genetically engineered cell, and b) determining the level of an indicator, which correlates with modulation of a FP receptor variant, wherein an alteration in the level of said indicator as compared to a control level indicates that said compound is a compound that modulates a FP receptor variant, wherein said FP receptor variant in step (a) is a polypeptide comprising the amino acid sequence of SEQ ID NO:8.

13. – 19. (Canceled).

20. (Previously presented) A method for identifying a compound that specifically binds to a FP receptor variant, comprising: a) contacting said FP receptor variant with a compound, wherein said FP receptor variant is an isolated FP receptor variant or a FP receptor variant over-expressed in a genetically engineered cell, and b) determining specific binding of said compound to said FP receptor variant, wherein said FP receptor variant in step (a) is a polypeptide comprising the amino acid sequence of SEQ ID NO:24.

21. (Previously presented) A method for identifying a compound that specifically binds to a FP receptor variant, comprising: a) contacting said FP receptor variant with a compound, wherein said FP receptor variant is an isolated FP receptor variant or a FP receptor variant over-expressed in a genetically engineered cell, and b) determining specific binding of said compound to said FP receptor variant, wherein said FP receptor variant in step (a) is a polypeptide comprising the amino acid sequence of SEQ ID NO:8.

22. – 32. (Canceled).

33. (Previously presented) A method for identifying a compound that differentially modulates a FP receptor variant, comprising: a) contacting said FP receptor variant with a compound, wherein said FP receptor variant is an isolated FP receptor variant or a FP receptor variant over-expressed in a genetically engineered cell; b) determining the level of an indicator which correlates with modulation of said FP receptor variant; c) contacting a second receptor with said compound; d) determining the level of a corresponding indicator which correlates with modulation of said second receptor; and e) comparing the level of the indicator from step (b) with the level of the corresponding indicator from step (d), wherein a different level of the indicator from step (b) compared to the level of the corresponding indicator from step (d) indicates that said compound is a compound that differentially modulates said FP receptor variant, wherein said FP receptor variant in step (a) is a polypeptide comprising the amino acid sequence of SEQ ID NO:24.

34. (Previously presented) A method for identifying a compound that differentially modulates a FP receptor variant, comprising: a) contacting said FP receptor variant with a compound, wherein said FP receptor variant is an isolated FP receptor variant or a FP receptor variant over-expressed in a genetically engineered cell; b) determining the level of an indicator which correlates with modulation of said FP receptor variant; c) contacting a second receptor with said compound; d) determining the level of a corresponding indicator which correlates with modulation of said second receptor; and e) comparing the level of the indicator from step (b) with the level of the corresponding indicator from step (d), wherein a different level of the indicator from step (b) compared to the level of the corresponding indicator from step (d) indicates that said compound is a compound that differentially modulates said FP receptor variant, wherein said FP receptor variant in step (a) is a polypeptide comprising the amino acid sequence of SEQ ID NO:8.

35. – 45. (Canceled).

46. (Previously presented) A method for identifying a compound that differentially binds to a FP receptor variant, comprising: a) contacting said FP receptor variant with a compound, wherein said FP receptor variant is an isolated FP receptor or a FP receptor variant over-expressed in a genetically engineered cell; b) determining specific binding of said compound to said FP receptor variant; c) contacting a second receptor with said compound; d) determining specific binding of said compound to said second receptor; and e) comparing the level of specific binding from step (b) with the level of specific binding from step (d), wherein a different level of specific binding from step (b) compared to the level of specific binding from step (d) indicates that said compound is a compound that differentially binds to a FP receptor variant, wherein said FP receptor variant in step (a) is a polypeptide comprising the amino acid sequence of SEQ ID NO:24.

47. (Previously presented) A method for identifying a compound that differentially binds to a FP receptor variant, comprising: a) contacting said FP receptor variant with a compound, wherein said FP receptor variant is an isolated FP receptor or a FP receptor variant over-expressed in a genetically engineered cell; b) determining specific binding of said compound to said FP receptor variant; c) contacting a second receptor with said compound; d) determining specific binding of said compound to said second receptor; and e) comparing the level of specific binding from step (b) with the level of specific binding from step (d), wherein a different level of specific binding from step (b) compared to the level of specific binding from step (d) indicates that said compound is a compound that differentially binds to a FP receptor variant, wherein said FP receptor variant in step (a) is a polypeptide comprising the amino acid sequence of SEQ ID NO:8.

48. – 58. (Canceled).